IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants:	Bauman et al.	)
		) Group Art Unit: 2615
Serial No.	10/773,731	)
		) Confirmation No. 8615
Filed:	February 5, 2004	)
		) Examiner:
For:	HEARING AID SYSTEM	) Walter F. Briney III
		)

Commissioner for Patents
P.O. Box 1450
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REPLY BRIEF

In response to the Examiner's Answer mailed December 12, 2007, the Appellants submit the following reply for consideration.

REMARKS

All points made in the Applicant's Brief are reiterated herein. However, certain of the Examiner's points are specifically addressed below:

(1) The Examiner indicated that claims 1-12, 19, 21-24, 26-29, 35, 40, 42-55, 58-60, 62, 64 and 66 are indefinite with regard to the hearing aid receiver generating about three decibels or below of insertion loss. In the Examiner's Answer, the Examiner predicates the rejection on the idea that an insertion loss test cannot be repeated. This is wholly untrue.

Insertion loss testing is done with the hearing aid in the ear canal, but switched off. The measured value is compared against an open ear test probe to calculate insertion loss. In order to test whether a hearing aid meets this limitation, one could easily make this calculation for one, or for a plurality of individuals. Accordingly, the Examiner's contention that insertion loss value is indefinite is wholly without basis.

The Examiner's discussions of non-linearity and levels of sound are simply not applicable to insertion loss values and only confuse the issue. *Again, testing for insertion loss is simple, with a probe measurement of the empty ear and a probe measurement with the hearing aid in place, but switched off.* It is easily repeatable for one patient or for groups of patients. The Examiner's rejections are in error.

The Examiner references variability in dimensions of various ear canals. Thus, the Examiner implies that insertion loss can never be a viable measuring point for hearing aid performance. However, this ignores the fact that insertion loss is a standard testing value in the hearing aid art. One of ordinary skill in the art (an Audiologist, etc.) would readily recognize and understand what is claimed. *See Seattle Box Co., v. Industrial Crating & Packing, Inc.*, 731 F.2d 818, 221 USPQ 568 (Fed. Cir. 1984); MPEP 2173.05(b) (The fact that claim language, including terms of degree, may not be precise, does not automatically render the claim indefinite under 35 U.S.C. 112, second paragraph. Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification). Again, the Examiner's rejections are in error.

(2) Regarding the Examiner's comments at page 8 with regard to Pluvinage, the Examiner contends that Pluvinage would "inherently generate the same insertion loss." The Examiners

assumptions are based upon the Examiner's indication that the Knowles receiver, should it be used in the Pluvinage system would read on the claim.

This wholly ignores that the microphone sound tube is also side by side with the receiver in the ear canal taking up space. The combination of the receiver and the microphone sound tube would take up a great amount of space in the ear canal, and would result in significant insertion losses. Contrary to the Examiner's contentions, Pluvinage does not teach or suggest an open ear configuration generating three decibels or below of insertion loss (note that this also applies to the Examiner's arguments, e.g., at page 12, 15, etc., wherein the Examiner attempts to apply the receiver size of the EH series receiver without reference to the context of Pluvinage (which requires both the microphone sound tube and the receiver side by side in the ear canal)).

The Examiner also suggests that it would be obvious to one of ordinary skill in the art to remove the sound tube. However, the Examiner completely discounts evidence submitted by the Applicant, including expert testimony by Drs. Berlin and Glaser detailing why one of ordinary skill in the art would NOT be motivated to remove the sound tube (since the sound tube is ***essential*** to the operation of Pluvinage).

The Examiner has indicated that Dr. Berlin's testimony "lacks founding in the Pluvinage reference" (see page 29 of the Examiner's Answer). This argument is misleading. Dr. Berlin reviewed the Pluvinage reference, testified as to his understanding of the teachings, and referred to specific sections of Pluvinage in testifying as to his analysis. Dr. Berlin's testimony is based specifically on the teachings of Pluvinage. The Examiner is in error to simply dismiss his testimony (by substituting his own opinion against Dr. Berlin's expert testimony analysis).

We also note that the Examiner's comments at the bottom of page 30, wherein the Examiner notes that Dr. Berlin's testimony has been undermined by the Appellant's argument, are also untrue. Dr. Berlin's testimony forms a basis for the rationale that the sound tube is required by Pluvinage.

Also, the Examiner talks in circles generally about hearing aids used by GN Resound in the early 1990's. However, the Examiner has not included any such prior art documents in his rejections. Pluvinage is the subject of the rejection, and Dr. Berlin has fully described why Pluvinage requires the sound tube.

It is also unclear what the Examiner infers by stating "the tube does not connect the microphone to the processor, as alleged, but rather the tube connects the hearing aid wearer's ear

to the microphone." The point is that Pluvinage must have the microphone sampling within the ear canal and provides and allows no basis for removal of the microphone sound tube.

The Examiner has not presented any evidence to discount or rebut the expert testimony evidence. The Applicant has rebutted the Examiner's attempted *prima facie* case. The Examiner is not permitted to simply ignore this fact.

The Examiner's attempt to find motivation in one of ordinary skill in the art by virtue of avoiding patent infringement is also absurd. This would effectively negative every teaching in every art, meaning that if reference A taught that element B was essential, it must also teach that element B is optional, or even not desired. The Examiner's rejections are clearly in error.

(3) With regard to the Examiner's comments beginning at page 17 (Feeley and Fretz), the Examiner appears to indicate that the hearing aid industry believes the use of molds to be inherently problematic. This remark is made with reference to Fretz, which simply uses a sound tube in the ear canal to deliver sound. The Examiner's argument is misleading.

Contrary to the Examiner's contentions, the hearing aid industry prefers different styles of hearing aids for different patient scenarios. Molds are still used, and indeed are preferred, for certain treatment scenarios.

The Examiner indicates that Fretz teaches away from molds, but one could easily argue that Fretz also teaches away from use of speakers in the ear canal (since Fretz lauds the benefits of simply having a tube in the ear canal). Fretz and Feeley are thus wholly incompatible references. Fretz does not provide motivation for the removal of the mold from Feeley (if Fretz provides motivation for anything, it is for complete change of Feeley, placing the speaker in the BTE, doing away with the wired speaker/mold and instead substituting in a sound tube). Thus, the Examiner's rejections are in error.

At pages 17-18, the Examiner also again completely ignores the expert evidence, which showed that the mold was essential to Feeley. The Examiner discounts the expert testimony as "nothing more than an opinion" (see page 32). The Examiners testified as to what of one skilled in the art would understand from Feeley.

This evidence was submitted because the Examiner and the Applicant disagreed as to what one of ordinary skill in the art would conclude from the references. Now that the understanding of one of ordinary skill in the art has been established, the Examiner's prima facie case has been rebutted. The Examiner cannot simply ignore this fact.

(4) With regard to the Examiner's argument at page 21 (Feeley, Fretz, Pluvinage, Knowles, Miller), the Examiner again ignores the context of Feeley, which requires a mold. One cannot simply look at an uninstalled, unpackaged bare receiver as in the Knowles catalog and indicate that the "maximum lateral dimension" teachings are found. For Feeley (regardless of what receiver is installed therein), the maximum lateral dimension will be the maximum lateral dimension of the mold (which corresponds to the ear canal dimensions). Again, the rejections are in error.

(5) With regard to the Examiner's comments at page 22, we note that the Examiner is attempting to characterize the Applicant's invention. Simply put, the Applicant's invention relates to an open ear hearing aid receiver in the ear, not a tube system as in Fretz, and not a hybridized tube/speaker system as in Pluvinage. Regardless of what the Examiner contends, the record does ***not*** show a hearing aid system with a speaker suspended in the ear canal in an open ear configuration.

The Examiner attempted to modify each of the asserted prior art references in an effort to find the Applicant's invention. In response, we argued that the modifications would not be proper with reference to the understandings of those of ordinary skill in the art. We submitted detailed expert evidence declarations in support of our arguments, and in doing so, rebutted the Examiner's attempted *prima facie* case of obviousness.

Subsequently, the Examiner has improperly discounted the rebuttal evidence and has failed to provide any viable *prima facie* case (the Examiner cannot counter the Expert testimony with his own contrary opinion).

(6) With regard to the Examiner's comments at page 24, the Examiner is selectively arguing against the viability of the Expert testimony. For example, the Examiner indicates that Dr. Glaser fails to indicate why Pluvinage requires a sound tube. *It is conspicuous that the Examiner does* ***not*** *mention Dr. Berlin's detailed analysis of why Pluvinage requires a sound tube, but instead implies that the evidence was lacking in that regard.*

The Examiner also faults Dr. Glaser for describing Feeley as an ear occluding design, and indicates that "Feeley disclosed the use of an open mold." This ignores the fact that the experts

positively indicated that the term "open mold" is still a mold (it is simply a vented mold). This in no way negatives the viability of the expert evidence.

The Examiner refers to the expert testimony as mere "tenuous allegations." The Applicants submit that the Board will readily see the substance to Drs. Berlin and Glaser's testimony evidence. The Board will also see that the evidence is directly responsive to the Examiner's asserted *prima facie* case. The Examiners denigration of the credibility of the experts is also unfounded and inappropriate.

(7) With regard to the Examiner's comments at page 27, the Examiner again mischaracterizes the relevant marketplace. The Examiner discounts commercial success by comparing receiver in the open ear canal sales with all of hearing aid sales, or all of BTE hearing aid sales. That is like saying that a particular catheter is not successful because that catheter only accounted for a small percentage of medical device sales (rather than by comparing against catheter sales).

Also, the examiner points to one expert statement in the Dozier article that appears to indicate that the hearing aid industry does not spend much in advertising. We presented two separate experts that reject the idea that not much advertising is done in the hearing aid industry. We also presented declarations with detailed advertising materials for a plurality of companies. We submit that it is clear from the record that a great deal of advertising is done in the relevant market, and that despite Vivatone's extremely minimal advertising, Vivatone enjoyed great commercial success.

(8) With regard to the Examiner's comments at page 28, we note that the Examiner wholly discounts the evidence of copying and laudatory statements by competitors by asserting that the prior art already teaches the Applicant's invention (thus, the prior art was copied rather than Vivatone). Reference is made to the various declarations that compare the Vivatone device with the subsequent copies.

Also, we have already noted that the prior art does *not* teach a receiver suspended in the ear canal in an open ear configuration. The Examiner's arguments are without viable basis.

CONCLUSION

During substantive prosecution, the Examiner and the Applicant disagreed with each other as to what the prior art references teach or suggest to one skilled in the art. Rather than to continue to rely on argument alone, the Applicant provided evidence, in the form of expert testimony, both as to what the prior art references teach or suggest to one of ordinary skill in the art and as to the viability of the secondary consideration evidence. In doing so, the Applicants rebutted the Examiner's *prima facie* case of obviousness and validated the secondary consideration evidence.

In response, the Examiner maintains his opinion as to the understanding of one of ordinary skill in the art and disagrees with the Examiner's evidence and testimony. We submit that the Examiner is not permitted to offset the expert testimony with his own contrary opinions.

The Applicants have made diligent efforts, both here and in the previous record, to illustrate how the Examiner's prima facie case of obviousness is fatally flawed. The Applicants have also provided tremendous evidence of secondary consideration in support of patentability by way of the three consecutive Declarations of Leon Hirsch, and the subsequent Declarations of Drs. Berlin and Glaser. The claims should be judged patentable on either or both accounts.

In view of the foregoing, it is urged that the final rejection of Claims 1-12, 19, 21-24, 26-29, 35-38, 40 and 42-67 be overturned. The final rejection is in error and should be reversed. The fee set forth in 37 CFR 41.20(b)(2) is enclosed herewith. If there are any additional charges with respect to this Reply Brief, or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,
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